Geometry Connections

<u>ISBN</u> **9781603280129**

| Basal student hard bound textbook | | |
|-------------------------------------|--------------------------|---------|
| | Teacher Edition | |
| 9781931287616 | | \$90.00 |
| Geometry Connections Teacher | | |
| | Essential Items | |
| 9781603280143 | | \$20.00 |
| Hinged Mirrors | | |
| | Ancillary Items | |
| 9781931287630 | Nimas | \$5.00 |
| Geometry Connections Extra Practice | | |
| 9781931287623 | Nimas | \$20.00 |
| Geometry Connections Parent Guide | | |
| | Free with Purchase items | |

Contract Price \$57.00

> <u>Grade</u> 9, 10, 11

> > TYPE P2

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2007

<u>Author</u> Dietiker, Kysh, Sallee, & Hoey

<u>Edition</u>

1st

<u>Content</u> Geometry

Readability

7.5

Accessibility

Nimas

<u>Research</u>

www.cpm. org/teachers/research. htm

| پ | ISBN 978160328 | 0129 Publisher - CPI | VI Ed | | P |
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| the Publisher | Type - P2 Author - Dietiker, Kysh, Sallee, & | | | ey | d by |
| ρ | Copyright - 2007 | Edition - 1st | Readability - | 7.5 | the Pu |
| Provided | Course - Geometry | | Grade(s) - | 9, 10, 11 | blishe |
| | Teacher Edition ISBN if applicable | | | | |

Overall Recommendation:

Recommended as BASAL

Overall Strengths, Weaknesses, Comments:

if this box is not checked, the evaluators have chosen NOT recommend as basal

Honors students may find this textbook most useful. The content is presented succinctly and with the expectation that students understand most prior mathematics concepts. With transitions between sections often occurring mid-page and no colorization, the general student may find the text to be uninteresting.

NIMAC Accessibility N Ancillary Yes Free with Purchase No

Research Yes www.cpm.org/teachers/research.htm

Basal student hard bound textbook

CRITERIA

This basal resource ...

| Α. | Encompasses KY | Content Standards & | Grade Level Expectations | Strong Evidence |
|----|-----------------------|---------------------|---------------------------------|------------------------|
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Text is designed to be used in an elective course outside the Program of Studies

| Text is designed to be used in an elective course outside the Program of Studies | | | | |
|--|-------------------|--|--|--|
| 1) Includes the 5 Big Ideas of mathematics to the following extent: | | | | |
| a) Number Properties and Operations | Strong Evidence | | | |
| b) Measurement | Strong Evidence | | | |
| c) Geometry | Strong Evidence | | | |
| d) Data Analysis and Probability | Moderate Evidence | | | |
| e) Algebraic Thinking | Strong Evidence | | | |
| 2) Addresses content-specific enduring understandings from the related Program of Studies standards. | Strong Evidence | | | |
| 3) Addresses content-specific skills and concepts from the related Program of Studies standards. | Strong Evidence | | | |
| 4) Content addressed is current, relevant and non-trivial | Strong Evidence | | | |
| 5) Provides opportunities for critical thinking/reasoning | Strong Evidence | | | |

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

Textbook includes all relevant content from the Program of Studies. The concept of proof/justification is emphasized throughout.

B. Functionality & Suitability

Strong Evidence

1) Suitability

Strong Evidence

• Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality

Strong Evidence

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community
- Interconnections among mathematical topics

3) Connections to Literacy

Strong Evidence

- Employs a variety of reading levels and is grade/level appropriate
- Use of multiple representations-concrete, visual/spatial, graphs, charts, etc.
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- The text is engaging and facilitates learning
- Embedded activities enhance the understanding of the text *Note: may apply to either student or teacher editions*

4) Connections to Technology

Strong Evidence

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data
- Embeds web links as a mathematics resource.

5) Support for Diverse Learners

Moderate Evidence

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
- Challenge for gifted and talented students
- Support for students with learning difficulties
 - Note: may apply to either student or teacher editions

6) Strengths, Weaknesses, Comments:

• Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Material is comprehensive and provides challenges for the more advanced students. The textbook is written at a high reading level; students with difficulties in reading may find the

material difficult to comprehend. Connections to Geometer's Sketchpad, Cabri Jr., and the Interner are made. Numerous extensions are provided for gifted students.

C. Supports Inquiry and Skill Development

Strong Evidence

1) Promotes Inquiry, research and Application of Learning Strong Evidence

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.
 Note: may apply to either teacher or student edition

2) Skill Development

Strong Evidence

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.
- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

Cooperative learning models provide opportunities for all students to learn and apply geometry skills. The focus on critical thinking and reasoning skills is evident throughout. Students with gaps in knowledge may find some material difficult to comprehend; a thorough understanding of algebra is needed.

D. Supports Best Practices of Teaching and Learning

Moderate Evidence

1) Engages Students

Moderate Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

Moderate Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

 Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Students with learning disabilities, or weak reading or math skills, may find the material difficult, and little scaffolding is demonstrated in specific lessons (although general suggestions for assisting these students is provided).

E. Has an Organization/ Format that Supports Learning and Teaching

Moderate Evidence

1) Organizational Quality

Moderate Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

Little or No Evidence

• Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

• Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Emphasis on using all available space on pages makes the textbook less than engaging for students, as the lack of color or page transitions detracts from the focus of all but the most advanced students. Few materials are provided other than the teacher and student text.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

Little or No Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

2) Strengths, Weaknesses, Comments:

• Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Few materials are provided beyond the teacher and student text.